

SENATOR BINGHAM WILL BE SPEAKER AT COMMENCEMENT

Exercises to be Held This Year
at Symphony Hall on
Fourth of June

CLASS OF 1879 IN LINE

Bob Whittemore Will Furnish
Music for Senior Prom
at Hotel Statler

Senator Hiram Bingham of Connecticut will be the Commencement speaker at the graduation exercises to be held in Symphony Hall on June 4. This will be the first time since Technology moved across the Charles River that the exercises have not been held in the Great Court. Many former exercises, were held in Symphony Hall.

Marching in the academic procession at Commencement this year will be the Class of 1879, the Fifty Year Class, members of which will be guests of President Samuel W. Stratton at a luncheon at his home on Commencement day.

Bob Whittemore's band will furnish the music for the annual Senior Prom that is scheduled to be held in the Hotel Statler on the evening of June 4. A dinner will be served and some form of entertainment provided for the intermissions in dancing.

No definite program has been selected for the Class Day exercises as yet but the tentative program is as follows:

1. Orchestra.
2. Welcome—Earl W. Gleen, First Marshall.
3. Presentation of Institute Ring—Oswald V. Karas.
4. Acceptance of Institute Ring—John F. Bennett, President of the Class of 1930.
5. Ivy Oration—Hunter Rouse.
6. Presentation of Class Gift—C. Brigham Allen, President of Class of 1929.
7. Acceptance of Class Gift—President Samuel W. Stratton.

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EMBRYO DEVELOPMENT TO BE DEMONSTRATED

Clay modelling depicting embryological development will be demonstrated in Room 4-370 tomorrow afternoon at 1 o'clock by Dr. A. D. Mead, vice-president of Brown University and former head of the biological department of that University. He will trace the development of a frog from the embryo, and will probably demonstrate the development of a human face from the embryo.

Dr. Mead is an international authority on biology, and is known as an expert in clay modelling. Although this talk is intended primarily for students in G. 75, all other students are invited to this demonstration.

GRADUATE RETURNS TO WALKER FOR WIFE

Jack Bailey '28 and Miss Lillian Casalou, daughter of Harry Casalou, chef of Walker, were married Saturday May 11th. They will make their home in Bristol, Pennsylvania where Bailey is working with the Keystone Aircraft Corporation.

Parade of Chevrolets Assembles at Walker

Great and small, crowded together like a funeral procession, about 40 Chevrolets lined up in front of Walker Memorial for a big parade yesterday morning. Every new make of the passenger and truck models was appropriately distinguished with a large sign praising its features and the newest car colors diverted many of the men being to school to examine the General Motors product. About 9 o'clock the parade started for its tour of the city with a police escort. A few of the passersby were perfectly willing to buy a model on the spot, but their finances prevented them from doing so.

Warning Made Against Copper-Plated Salad

Culinary art was promulgated by the institution of a new method of preparing salad in a freshman chemistry lecture Tuesday during the study of copper. In explaining the effect of acid upon copper cooking utensils Professor H. Monmouth Smith claimed that the preparation by cooking of salad in a copper vessel aided corrosion and that the food should be cooked in another utensil. When the discrepancy was realized, the only coed in the class was questioned as to some acidic cookable food.

Professor Webster Addresses Faculty

"Anglo-American Relations" is
the Topic at Faculty
Club Luncheon

At the luncheon meeting of the Faculty Club held in the Faculty Dining Room of Walker Memorial yesterday noon, Professor Charles K. Webster addressed the members on "Anglo American Relations."

Professor Webster is Professor of International Politics at the University of Wales, and Professor of History at Harvard. During the War he served as Subaltern in the Royal Army Service Corps in England and France, and later as a member of the War Office. During the Peace Conference, he was Secretary to the Military Section of the British Delegation. He has published several works on British diplomacy and British foreign policy.

It is the opinion of Professor Webster that relations between the two countries will always be friendly. He believes that it is inevitable that two such powerful countries will inevitably have frequent causes for friction, but he does not think that these differences can ever reach the point of hostility. He cites as examples the recent controversies regarding debt settlement and the building of battleships, and states that these questions have been practically settled to the mutual satisfaction of the two nations.

CAMP MASSAPOAG CAPACITY TO BE INCREASED TO 300

Letters Describing Camp to be
Sent to All Potential
Freshmen

STILL NEED MORE ROOM

Camp Massapoag, according to the T. C. A., will entertain about 300 students next fall in the annual week-end outing made by members of the incoming freshman class. The capacity of the camp in 1928 was only 200 including upperclassmen and many students were unable to go due to the limited sleeping quarters. At the meeting of the Executive Committee of the T. C. A. plans for the camp were discussed and it was decided to send letters to all freshmen, asking them to go on the outing.

Bursar Horace S. Ford wishes the camp directors to be able to take care of all the men who apply, but financial assistance must be given the T. C. A. to obtain more quarters. There is a possibility that the R. O. T. C. might be able to lend some tents and cots to enlarge the capacity of Camp Massapoag. At present the T. C. A. pays for one quarter of the cost of the week-end trip, since they charge \$6 instead of the true cost of \$8.

Formerly those who take the College Board Entrance Examinations have been sent the information about freshman camp first and the remainder of the campers have been secured from the transfers. Last year it was necessary to deny most of those who took the Institute exams in September the opportunity of going.

If the capacity of the camp is increased 50 per cent it is felt that all men who wish to go will be able to do so since the cost, the room hunting, summer vacations, and the date usually prevents about half the new men from attending. With the increased number of men, there will be more leaders, speakers, and upperclassmen to initiate the freshmen into the traditions, customs, and history of M. I. T.

Hawkins Captain Elect of 1930 Soccer Team



Edgar M. Hawkins '30

T. E. N. Features Aviation In May Issue Out Today

Articles of General Interest
to Entire Student Body
Also Included

"Aviation" is the theme of the May issue of T. E. N., which is on sale today and tomorrow. In addition to the articles dealing with this subject there are included a number on subjects of general interest to the student body.

"Airplane Engineering", by Alfred A. Gassner is a description of the problems met with in the designing of airplanes, and the way in which they are overcome. The author is in charge of engineering for the Atlantic Aircraft Company, makers of the famous Fokker planes.

"Airplane Manufacture" by Alfred B. Berghell '32 is a discussion of the parallelism between the aeronautical and the automobile industries. The author spent several years in the aviation industry before coming to the Institute.

Among the articles of general interest, "The Senior's First Job", by Colonel Frank L. Locke '86, Person-

(Continued on Page 4)

ANNUAL INSPECTION TO BE HELD FRIDAY

Company C Chosen Best Drilled
Of Freshman Companies

In preparation for the annual inspection to be held on Friday afternoon at 4:15 o'clock, under the supervision of Brigadier General William P. Jackson, of the First Coast Artillery Corps, competitive drilling to determine both the best drilled individual and the best drilled freshman company was held on Monday afternoon during the regular drill period. Company C, which has been in charge of Captain Crawford M. Kellogg this year, was adjudged the best drilled of the freshman companies, and George D. Freeman '32, of Port Au Prince, Haiti, was the best of the individual competitors.

The individual competition was open to all members of the freshman R. O. T. C., and as a result of drilling held during the past week about twenty-five men were selected for the final competition on Monday. The manual of arms and various individual movements were taken as the basis upon which to judge the drilling, and three of the twenty-five were finally chosen as the pick of the Battalion. George D. Freeman took first honors, William A. Kirkpatrick, second, and Howard A. Kinzer third. Regular platoon and company movements were chosen for the company drilling, and after a short drill Company C was chosen as the best company. Participants in the First Corps Area Rifle Match which was won by the M.I.T. Rifle Team this year, will be presented with medals during the inspection on Friday.

M. I. T. A. A. GIVES APPROVAL OF NEW MANAGERS ELECT

Class Numerals Approved For
First-Year Track and
Rifle Teams

HAWKINS SOCCER CAPTAIN

Numerals Are Also Awarded on
Interclass Meet to the
Point-Winners

Edgar M. Hawkins '30 was approved as captain of the Soccer team for next year at the meeting of the Executive Committee of the M. I. T. A. A. held last Monday. Hawkins was recently elected vice-president of the Institute Committee. The recommendations of E. J. Norris '31 as manager of the wrestling team and W. H. Hodges '32 as manager of the freshman rifle team for next season were also approved.

In the same meeting the following members of the freshman track team who were point winners in the meet with Huntington were recommended for the award of class numerals: L. W. Bailey, E. C. Beck, D. R. Gilman, W. A. Hall, J. W. Jewett, L. P. Leino, J. A. Robertson, R. C. Rogers, and R. E. Wayne. The members of the freshman rifle team were also recommended for the same award, J. F. Langley, W. H. Hodges, G. F. Barnett, R. G. Cunningham, W. E. Nichols, T. H. Jenkins, A. W. Dunning, E. A. Eddy, J. C. French, N. I. Paulson, and J. E. Strong, manager.

Those men who scored points in the Interclass track meet were recommended for the award of numerals in their respective classes. Those recommended are: G. W. Burgess, P. D. Crout, N. E. Earl, M. Gray, A. Fleming, J. T. Hallahan, and A. N. Lawrence of the Class of 1929; R. L. Berry, M. H. Bragdon, F. E. Elmer, L. N. Gonzales, M. S. Herbert, L. P. Jandris, F. A. Ladd, L. S. Thorsen, and M. O. Zeigler of the Class of 1930; H. K. Baltzer, P. S. Benjamin, C. Broder, R. Dahle-Hanson, H. A. Danforth, B. Grondal, R. T. Leadbetter, W. T. Moody, and E. B. Whitworth of the Class of 1931; L. W. Bailey, J. G. Cree, M. H. Etstein, D. B. Gilman, W. A. Hall, J. W. Jewett, J. F. Kelly, A. G. Reidell, and J. A. Robertson of the Class of 1932.

SENIORS MAY MAKE GIFT TO ENDOWMENT

\$90 Gift Will Amount to Same as
Proceeds from Insurance

Those Seniors who did not favor the endowment insurance plan as a means of contributing to the class gift to the Institute, will have an opportunity to do their share by making an outright gift. A sum of \$90 put at interest until the 25th Class Reunion when the \$75,000 endowment will be presented will amount to the same as the proceeds from an insurance policy taken under the plan used this year.

Since the goal set has not as yet been reached, the Committee wishes as many Seniors as possible to take this means of increasing the Class Gift. All those interested should see C. Brigham Allen '29, William Baumrucker, Jr. '29, or Mr. E. L. Goodrich in Room 3-213 to get the particulars.

Dorm Porters Display Energy Playing Cricket

"Big Bill Thompson," formerly of Chicago, would probably raise quite a disturbance if he saw the porters of the dormitories playing cricket during the noon hour. The English game attracts the students' attention, since bowling the ball appears to cause queer contortions among the players. However they do not seem to have mastered the intricacies of the game so far as most of the time is spent in looking for the ball under the autos parked about the field.

World-Famed Integrator is a Product of Electrical Engineering Research

Electromechanical Integrating
Device Originated Here
Early in 1925

The development of electromechanical integrating devices has been given much attention by the Research Laboratory of Electrical Engineering at the Institute. This research on the design of machines for solving complex integrals such as are encountered in many engineering problems has become well-known throughout the world. The work has been under the direction of Dr. Vannevar Bush of the Electrical Engineering Department.

Many electrical engineering problems are of such complexity that their mathematical analysis is practically dependent upon a mechanical means of solution. It was an appreciation of this situation which led to the beginning of a program of research upon such devices at Technology. In 1925 the need arose for some rapid method for evaluating a complex integral encountered in the study of transient voltage phenomena and communication networks. The usefulness of the "superposition formula" which had been developed to solve problems in this field was materially limited by the difficulty of its mathematical solution. At the suggestion of Dr. Bush the Research Laboratory of Electrical Engineering undertook to develop electromechanical means for performing the necessary integrations.

The fundamental principle of the original electromechanical integrator lay in impressing voltages, varied proportional to the ordinates of the curves to be integrated, upon a Watt-hour meter which serves as the integrating element. Herbert R. Stewart '24 and Francis D. Gage '22 designed

and built the first model early in 1925. Improvements were made on this model in 1927 by Harold L. Hazen '24. All the work was under the supervision of Dr. Bush.

The operation of this machine is that after the functions to be integrated have been plotted and fixed on platens moving at constant speed in the direction of the axis, the curves are followed by operators who keep a pointer on the curve as it moves along. These pointers are attached to the sliders of potentiometers which are so connected that the varying voltage is fed to the Watt-hour meter. The revolution of the disk of this meter is then proportional to the integral of the plotted functions. Through an electromechanical arrangement and gear train a pencil is made to continuously follow the motion of this disk and to trace out on another moving plate the plot of the solution.

Uses Of The Integrator

This machine is extremely useful not only where complicated problems are concerned but also where experimental data which can be readily plotted but not readily reduced to formal mathematical equations must be used. Experimental problems in hysteresis loops are of this type and their solution by mechanical means is much more rapid than by mathematical processes.

The first model of the integrator has been greatly improved and at present an electrical integrating machine has been developed which contains two stages of integration and is suitable for the solution of general forms of second order differential equations. This gives a flexibility which enables the machine to be used in many engineering fields. In mechanical engineering it is useful in determining moment of inertia and axis

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As We See the Movies

LOEW'S STATE

"The Bridge of San Luis Rey," now playing as the feature picture at Loew's State; is an odd movie in all senses of the word. A weird story about peculiar people living over a century ago in a country most of us know nothing about, is portrayed with all the art and mystery that made the book of that name a prize novel.

The picture is not particularly thrilling, and in fact is drawn out considerably in some places, but for those who like something in a picture that is out of the beaten path and has a rather deep philosophical meaning to it, this picture would have an extraordinary appeal. There are continual ripples of humor created by the clowning that goes on between Lily Damita, Ernest Torrence, and the twin letter-writers, but the picture has to be serious in the main since it is trying to prove a philosophical theory.

On the feast day of St. Luis, an ancient Indian bridge named for the saint, that passes over a deep gorge suddenly breaks, precipitating five people into the abyss, and the whole town of Lima, Peru into frantic fear of the wrath of the Almighty. The picture is a graphical presentation of the findings of a priest in his search for an explanation of why the bridge fell, and why these particular people were chosen to be killed. His theory was that these people were at a fitting end of their existence on this earth, and that the logical time for them to die had come.

The acting, being odd, is hard to appraise as good or poor, but can merely be said to be quite suitable to the picture.

Jan Garber's band were pleasing in their movietone act, providing some well played dance selections. In the Russell Markert Dancers, the State has the best girl show this week that has been seen there all season. The rhythm and regularity of the chorus is remarkable, and their costumes beautiful. During changes there are some good little specialty numbers. "Oklahoma Bob" Albright puts on a humorous Western singing and dancing act. On the whole, the stage show this week is good.

Play Directory

Tickets for all theatres may be bought at Box-Office Prices from the T.C.A., Walker Memorial.

Stage

COLONIAL: "Show Boat"

A Zeigfeldian reproduction of Edna Ferber's famous novel; beautiful music, gorgeous settings and side-splitting humor withal.

SHUBERT: "Good Boy"

Starring a pinch-hitter for Helen Kane, who doesn't seem to realize her duty to the public.

HOLLIS: "Le Gallienne Repertory." Eva Le Gallienne and her Civic Repertory Company from New York. "Katerina," "The Cherry Orchard," "The Lady from Alface," and "Peter Pan," will be this week's offering.

PLYMOUTH: "The Wild Duck"

Blanche Yurka in the play which is regarded by many to be Ibsen's masterpiece.

APPOLO: "Blossom Time"

Outstanding for its music alone it follows the life of Franz Schubert, famous 19th century Viennese composer.

COPELY: "The Ghost Train"

A real mystery thriller having some very tense moments. An old favorite returns at popular demand.

Screen

FENWAY and OLYMPIA: "The Rain-Boy Man"

Eddie Dowling himself in person.

STATE: "Bridge of San Luis Rey"

The screen version of the famous prize winning novel by Thornton Wilder. The plot and atmosphere of the story have been accurately reproduced. Reviewed in this issue.

METROPOLITAN: "The Hole in the Wall"

Savouring of crooks and their method of blackmail by spiritualism. A talkie retaining many desirable features of the stage.

MAJESTIC: "Noah's Ark"

A stupendous spectacle harking of the World War and its counterpart in Biblical days—the Flood. Some exceptional acting by Dolores Costello and George O'Brien.

At a certain venerable New England university the freshmen have a custom of crying "Fire" at every member of the opposite sex who passes near their dormitories. However, on a balmy spring evening repeated yelling of "Fire" in the absence of any female is often sufficient to bring an avalanche of assorted missiles flying out of the windows and giving the court beneath the general aspect of having been visited by a Kansas cyclone.

Willamette Instructors Explain the Reason for Students Flunking

Say Largest Percentage Are Failed Because of Excessive Activity Schedules

In a series of questions given to the instructors at Willamette recently, concerning the reason students flunk courses, a group of interesting answers was given. One instructor said that many students were rattle-brained or lacking in real capacity to grasp the facts presented. Such students, he said, were wasting their time in remaining in college. Nearly ten percent of all the students come in this classification.

"Formerly only the bright students came to college," said another. "Fifteen years ago four percent of the high school graduates came to college; now forty percent enter. Many come not to grasp knowledge but because a college education has come to be regarded as a social necessity. Not that we are trying to raise the standards at Willamette. We are merely trying to uphold the things Willamette has stood for. We must either weed out the unfit or haul down the standards, and we do not choose to do the latter."

Not Always Mental Deficiency

Of course only a small percentage of the students on the flunk list can lay the blame on their mental incapacity; there are other causes for which the student is more directly responsible. In the second class is the student who has not learned how to think. "I'll venture to say," de-

clared one professor, "that there are many students in this school who could not sit and think consecutively on one subject five minutes if it were a matter of life and death."

Then there is the lazy student who may have gray matter but it is largely unfurrowed. He may spend time on his lessons, may sit by the hour in the library and look at his books but he is too lazy to concentrate and discover five relationships and details of his subjects.

Some Have No Purpose

Another type is the student who is just "going to college." He isn't aiming to learn anything in particular. He is a ship without a sail, drifting, and consequently doesn't get far. He will not disappoint himself because he sets no aims. He retains the knowledge that sticks to him without

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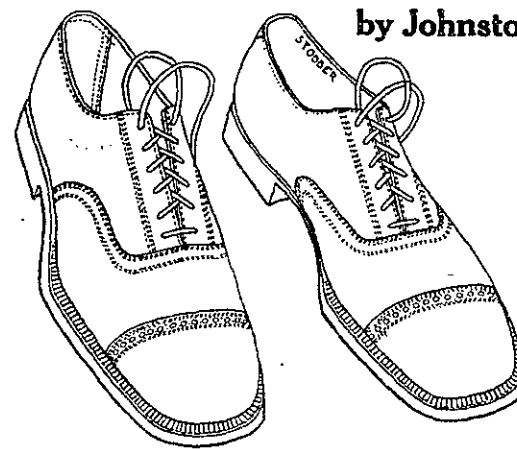
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LIMELIGHT ON ACTIVITY FUNDS

NOW that the smoke of the recent dormitory "scandal" has blown over, there comes to the notice of the undergraduate at Technology a proposed plan which would successfully alleviate any danger of a similar occurrence. Next year each activity at the Institute will be required to submit to the Budget Committee a brief financial statement semi-annually, and the committee will compile these statistics in a report which will be available for all students.

On the face of it, this proposition is not essentially different from the system now used. All of the major activities are at present required by the Institute Committee to prepare detailed financial reports. There are, however, a number of disadvantages to the present plan. When these reports are presented to the Budget Committee, they are stored away in their dusty files, there to remain for posterity. Anyone who wants to use them finds them available after a search; but the effort involved usually means that the records remain untouched. Furthermore, at present only those activities which handle considerable sums of money are required to submit their balance sheets to the surveillance of the committee.

The advantages of the published compilation of the reports of various activities are multiple. It is planned that the report will be ready in the fall, thereby giving concrete facts to the freshman who is considering "coming out" for an activity. With a complete statement of the financial status of an organization handy for reference, more people will make use of these figures. With the publication of the expense accounts of the smaller activities, the students may gain a definite knowledge of where their funds go. This fact will react to the advantage of the smaller groups, for a student body which knows that a group publishes its expenditures will feel no fear that there is danger of a misappropriation of funds.

But these points are of minor importance compared to the record for reference that these reports will furnish in later years. Particularly in the case of such events as Junior Prom and Senior Week, there is a deplorable lack of figures for the committees to govern themselves by. In rectifying this one great need, the proposed report will have established its usefulness.

HOMER, XENEPHON, ET AL.

SINCE the days when Mr. Dickens found his inimitable humor so highly amusing and lucrative almost three generations of men have come and gone and for most of this period the scientist has sat in the hall of fame before the public's gaze. No one mocks him now, but there is less enthusiasm shown in the latest developments of our physical world and perhaps a greater interest in the classics.

The changes in the intellectual tides and currents of the mind of man are mysterious and the somewhat awakened interest in classicism may be one of them. Unless someone voices an indefinite theory concerning the effect of the spiritual and social unrest of the world or of that inevitable father of all things, war, we are at a loss for an answer to the situation.

Interest in the classics, though weak at times, has never been dead nor struck from the curricula of our colleges and universities. It is no longer the callow boast and superficial ornament of the college graduate of old but we still have our confirmed lovers of Latin and Greek. Fifty years ago social and political fame was rarely attained without some pretense to acquaintance with them. Though the graduation speeches of the present day are not delivered in three ancient languages we still keep apace with the progress and triumphs of our fellow men and work under no apparent disadvantage. The liberal arts and the classics have come to be regarded as an important part of our education but in no sense are they given as much attention as our grandfathers accorded them.

It might be natural to suppose that the ceaseless race of our modern civilization is more or less responsible for the decay of our knowledge of classical literature. Aside from certain bigots who inhabit every strata of thought, science has been quick to welcome the return of classicism. Democracy, however, has been ultra-scientific and has only comparatively recently indicated a willingness to see the return of the classics to a greater popularity.

CREWS LEAVE FOR NEW YORK

Oarsmen Race Undefeated Columbia Crews Saturday In Harlem River Regatta

On Saturday, the Engineers will row against the so-far invincible Columbia eights, on the Harlem River in the last races this season before the Varsity goes in training for the Poughkeepsie Regatta. In the three races held this year, every Columbia crew has been victorious, having defeated Navy, Penn, Yale, and Princeton. Columbia won over the Navy by three lengths in their first race, duplicating the feat of the Engineers the week previous, and since then have won every race, defeating the famous Princeton eight by four lengths in a regatta last Saturday.

J. V.'s Use English Shell

Due to the accident in the Jay-Vee race in the "Brandy Wine" a shell imported for the Varsity, which was not used because of the superiority of the new Davy. The boat was used in England for a year by one of the Oxford colleges, and was purchased last year by the Institute. The J. V.'s have had one practice in the new boat, but the shell did not seem to meet the approval of the crew, and several minor changes were made before the workout last night.

Richardson May be Out

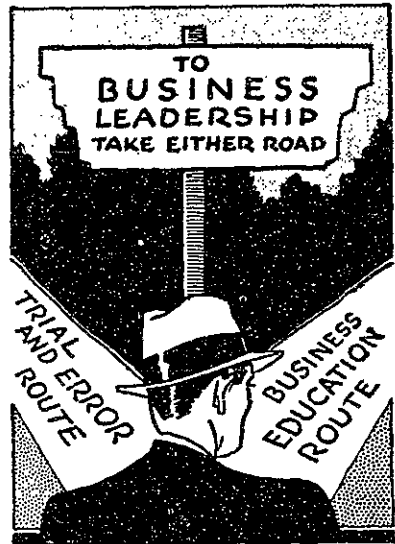
Whether or not Richardson will race in the first boat on Saturday is still in question, as his complete recovery from his recent illness has been rather slow. Dolbin has been rowing in Richardson's berth, and rowed an excellent race in last Saturday's regatta. Richardson will row in the second Varsity, should Dolbin be chosen to row in the first boat.

In the yearling boat, Kloeene, who rowed in place of Schulenberg last Saturday, will row again in this position in Saturday's race. He rowed a fine race against Kent at number six, and is expected to make a fine showing against the Columbia freshmen, who have yet to be defeated. Jim Smith, who is taking the place of Pat Manning, now sick in the hospital, will go to Columbia with the yearlings, who will be the first crew to race on the Harlem.

150's Show Improvement

Having had an idle week, the 150-pounders have been practicing daily, and have improved considerably since their last race. Saturday, they will meet an undefeated crew in their last race this season, and although their chances of winning are slim, they

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will give the fast Columbia boat a hard race. No time trials have been run this week for any of the boats racing Saturday, and the crews leave tonight for New York where they will have two days to finish training for their last race.

Tennis Team Will Meet West Point This Afternoon

Freshmen to Journey to Concord Tomorrow—Play Without Aid of Coach

This afternoon the Tennis team will meet the Cadets at West Point. Wigglesworth, Captain Cleary, Dame, and Ferrer are the men who left yesterday for New York to play in this match. In recent games the team has made noticeable progress over the form showed in the first matches of the year. Bowdoin fell before them with a score of 8-1 and Boston University was whitewashed 9-0, so it is hoped that the team will make as good a showing at West Point as they did two years ago.

The Intercollegiate are to be played on May 20, 21, and 22. The team that will represent Technology has not yet been picked but an announcement is expected before the end of the week.

Freshmen Play Tomorrow

Tomorrow afternoon the freshman team will play St. Paul's School at Concord with good chances for a victory. When they met Andover last week they were defeated by a score of 6-3, and although this score does not indicate it, they made a very good showing there. Lack of a freshman coach has considerably hampered the work of the team and under the circumstances they are doing well.

St. John's has added an odd new sport by introducing fox-hunting for students. The board of governors has obtained 150 acres of land on which the southern gentlemen may practice this sport.

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Coming Events on M.I.T.A.A. Schedule

- CREW**
Saturday, May 18
M.I.T. vs. Columbia on the Harlem
- TRACK**
Saturday, May 18
Varsity vs. New Hampshire at Durham
Freshmen vs. Holy Cross Freshmen at M.I.T.
- TENNIS**
Wednesday, May 15
Varsity vs West Point at West Point
Thursday, May 16
Freshmen vs. St. Paul's at Concord
May 20-21-22
M.E.J.L.T.A. matches at Longwood
- LACROSSE**
Saturday, May 18
Varsity vs. B. U. at B. U.
Freshmen vs. Brown freshmen at Brown
Saturday, May 25
Varsity vs. Boston Lacrosse Club at B.L.C.
- GOLF**
Saturday, May 18
Varsity vs. Bowdoin at Weston Golf Club

INTERCLASS LEAGUE ENDS FIRST ROUND

Seniors Lead With Three Games Won—Sophomores Second

At the end of the first round of the Interclass Baseball League, the Seniors are leading the field with an average of 1000, having won all three of their games. The Seniors, although they had a hard time in getting out a team, now have a first-class nine. Brig Allen and Marsh David are pitching for the team, and they have been well supported by the other members.

The Juniors, with Phil Riley as pitcher, have done good work. The infield is particularly strong, being made up almost entirely of former Beaver men.

Harrison, pitcher for the Sophomores, has been playing practically shut-out baseball, and this combined with the good hitting of the team, accounts for their rise to second place in the League.

The freshmen have won no games so far, but they have a good team, and are constantly improving.

So far the league has been very successful, and it is thought that there will be a close race for the championship and the cup. Numerals will be given to the members of the winning team.

Cross Country Men to Hold Spring Meeting

Interest is being revived in the popular cross country running by the announcement that there will be a meeting for the men interested on the twenty-third of this month. Coach Hedlund has an entire program to offer the men and hopes to see the men there in a body. The meeting is to be held in the Hangar gym.

THE COOP for Your Tennis Supplies

- | | |
|----------------------------|-------------------|
| Championship Balls | 50c—3 for \$1.25 |
| Pennsylvania Balls | 50c—3 for \$1.25 |
| Wright & Ditson Rackets | \$3.00 to \$20.00 |
| Lee Rackets | \$9.00 to \$18.00 |
| Tennis Racket Presses | 65c to \$1.75 |
| Tennis Racket Covers | 25c to \$2.50 |
| Eye Shades | \$1.00 |
| Tennis Rackets Restrung | \$2.50 to \$9.00 |
| Tennis Sneakers—Oxford | \$2.00 |
| Tennis Shoes | \$2.50 |
| Athletic Shirts | 50c to \$1.00 |
| Running Pants | 75c to \$1.50 |
| Sweat Shirts | \$1.25 |
| Tennis Shirts—short sleeve | \$2.50 |
| White Duck Pants | \$2.00-\$2.50 |

TECHNOLOGY BRANCH, H.C.S.

VARSITY TRACK MEN TO MEET WILDCATS

Great Improvement Marks Work Of Runners This Week

Next Saturday afternoon the Varsity track team will meet New Hampshire in the first dual meet between the two colleges. At the same time the freshmen will be engaging the Holy Cross freshmen on the home track. From the comparative scores of the two Varsity teams the meet promises to be a close one. It will be held on the track at Durham, New Hampshire.

During the past three days since the Maine meet last Saturday, a general improvement in the running of the team has been noticeable. Thorsen, McNiff, and Leadbetter have been especially outstanding. Thorsen ran a fast three-quarters in practice on Monday and gives every indication of having come into the form that has gained him so many records at the Institute. McNiff ran a good race last Saturday and has been steadily improving since then. Leadbetter fought gamely in the half mile race against Mank of Maine but was unable to prevent the Maine man from passing him. This test should serve him in good stead next Saturday against the Maine runners.

LAST LACROSSE GAME WITH B. U. TOMORROW

Tomorrow afternoon at four o'clock the Varsity Lacrosse twelve will engage Boston University on the new Tech Field. It will be the final official game for the Engineers, as their return game with the Boston Lacrosse Club, scheduled for a week from Saturday, will have to be cancelled on account of the early start of the final examinations.

Up to the present time the Engineers have lost all their games, which were played against much stronger and much more experienced opponents—Boston Lacrosse Club, Harvard, and Brown. These three teams are among the foremost of the East, and being defeated by them is no new experience for any collegiate team. Playing the way they did against such powerful combinations,

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Calendar

Wednesday, May 15
6:00—THE TECH Banquet, La Cantina Tea Room.

Thursday, May 15
4:00—M. I. T. Photographic Society Meeting, Room 5-230.
4:30—Baseball, Juniors vs. Freshmen, Tech Field.

Friday, May 17
4:15—Annual Inspection, R. O. T. C., Coop Field.
4:30—Baseball, Seniors vs. Sophomores, Tech Field.

Saturday, May 17
Track Meet, M. I. T. Varsity vs. New Hampshire at New Hampshire.

Undergraduate

MUSICAL CLUBS

All members of the Musical Clubs who have applied for charms are requested to call for them as soon as possible at the office of the Clubs in 303 Walker Memorial any afternoon at 5 o'clock.

FRESHMAN ADVISORS

Upperclassmen asked to be Freshman Advisors next fall should answer the T. C. A. as soon as possible stating whether they will or will not act as advisors to the freshmen, if they have not already done so.

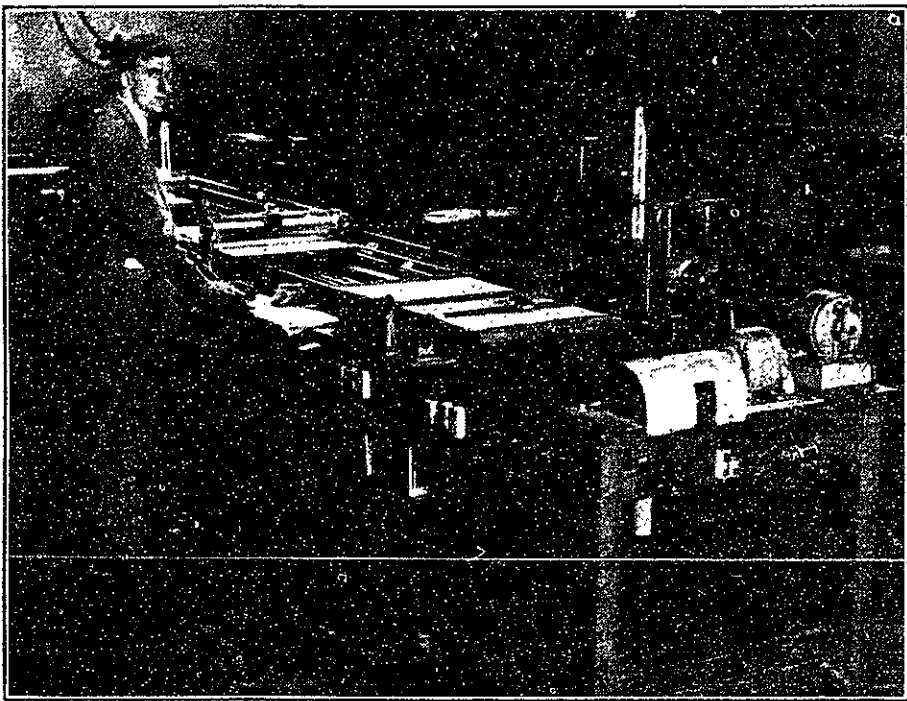
TRACK PICTURE

All Varsity and freshman members of the track team are requested to report in the basement of the Infirmary building at 5 o'clock, Tuesday, May 21, for the annual track picture to be taken. Report in track clothes.

UNDERGRADUATE NOTICE

Students who are graduating in June and who desire a photostat copy of their complete record should apply at the Records Office, Room 3-106. There is a charge of \$1.00 for each photostat. Photostats will be available July 1.

Intergraph Machine Which Has Almost Human Calculating Ability



EXTENDED RESEARCH ENDS IN INTERGRAPH

(Continued from Page 1)

of rotation. Volumes of solids of revolution may be readily computed with it. Much use can be made of the device in naval architecture and civil engineering. Chemistry also finds an application for it in computing the pressure-volume relations of gases. Even in the field of physics it is valuable, use having been made of it in the study of the motion of electrons in vacuum tubes.

The increasing application of electrical engineering principles and technique in the solution of "circuit" and "field" problems in acoustics, hydraulics, and aeronautics will undoubtedly make particularly valuable such electromechanical means of reaching solutions.

Improved Intergraph Planned

The work is being continued and the operations of the intergraph are being further extended to include the solution of integral equations with variable parameters, a type of equation which arises in electricity, hydraulics, and aeronautics. For higher order differential equations and for greater accuracy an entirely mechanical integrating device composed of several disk and wheel elements is being developed. The first mentioned machine is being developed by Truman S. Gray and the second by Harold L. Hazen '24 with Dr. Bush supervising.

The development of these devices will maintain Technology in the high place it has held in the field of mechanical computing devices.

The Pennsylvania Railroad has completed the marking of stations and other large structures in 36 cities and villages along its lines, for guidance of air travelers.

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COMMENCEMENT TALK BY SENATOR BINGHAM

(Continued from Page 1)

8. Class Prophecy and Gifts—H. Richard Boyer.
9. Stein Song.
10. Orchestra.

As usual the Senior picnic will be held on Rainsford Island. This event of Senior Week has always been the most popular as far as attendance is concerned and this year is not expected to be any exception. Those intending to go on this picnic should meet aboard the boat at "T" wharf at 10 o'clock May 31.

Redemption of sign-up for Senior Week will be held throughout this week. Separate tickets for the various events will also be on sale and may be obtained at the following prices: Booklet, \$1; Class Dinner, \$2.75; Picnic, \$3; Pops Concert, \$1.50; Prom, \$12; and Tea Dance, \$2.50.

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AVIATION FEATURED BY MAY T. E. N. ISSUE

(Continued from Page 1)

nel Director of the Institute, will probably be of interest to the greatest number of students. It is a summary of the opportunities available for Seniors, and the factors influencing the selection of a position.

Professor Charles L. Norton is the writer of "Industrial Physics", a discussion of the possibilities of this subject, the kind of work it embraces, and the preparation required for work in this field. Professor Norton is head of the Department of Physics at the Institute.

"Engineering Employment in South America," an anonymous contribution by an M.I.T. alumnus, contains some valuable information for the graduating engineer who contemplates a career in a foreign country.

Other articles appearing in this number are "Beams in Bending", a description of photo-elastic experiments which illustrate important principles of applied mechanics, and "Flying the M.I.T. Glider", an account of the recent tests made on this machine.

A two-page pictorial section bears out the general theme of the issue, depicting many types of airplanes, with details of their construction. The usual editorials, departmental notes, and book reviews complete the issue.

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PROFESSOR'S EXPLAIN WHY STUDENTS FLUNK

(Continued from Page 2)

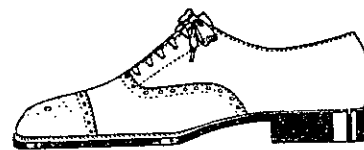
effort on his part—the rest slides off.

Perhaps the largest class of those who flunk are those who have too many irons in the fire. There are organizations galore on the campus, and some students want to belong to everything. As a result outside activities leave almost no time for perusal of text-books. Among outside activities that take a great deal of time is campus "fussing." The campus "fusser" goes to class unprepared, and explanation to the instructor is unnecessary—he has been "fussing" some girl on the campus the period before.

On compiling the report the writer adds that the justice of these statements on the part of certain faculty members is readily recognized, for surely nothing could be more tragic than the hauling down of the standards of the college. While the faculty is in sympathy with the students, it takes the attitude that if other climes seem fairer to the delinquents, they are free to try them.

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SHELLEY AND HARPER WIN VOO DOO AWARDS

Joseph M. Shelley '30 won the pair of theatre tickets offered by the Managing Board of Voo Doo for the best work in the Art and Literary Departments of the publication during the month of April. At the same time James E. Harper '32, received two tickets for having done the best work in the Business Department during the same month.

At the Washington and Lee University non-fiction has surpassed fiction in popularity among students. And Shakespeare is more popular than any modern writer.

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